Does list population affect general practice's relational coordination?

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Timo Sinervo
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DISCUSSION PAPER

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Helsinki 25 – 26 November, 2013

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Preface

The vision of the 7th NOVO Symposium is "*a Nordic Model for sustainable systems in the Health Care sector*". The core of this vision has remained unchanged during the 7 years of NOVO-network. We want to link together development and research of the three aspects of NOVO-triangle: work environment, efficiency and quality of care.

Nordic countries - as well as other countries - are struggling with economy crisis and increasing costs of health and social care. New innovations are needed for more cost-effective services. Large organizational reforms have been done in most Nordic countries in order to increase efficiency, integration of care or quality of care. What is typical to all countries, too, is the lack of personnel and severe problems in well-being of the employees. Major organizational changes do not automatically improve employees' well-being, as in many cases the result is opposite.

There is a risk that the employees' well-being is forgotten during the reforms. Our theme, Sustainable health care – innovative health services stresses the core idea of NOVO: how to find innovative, efficient work methods and organizations in health care – in a sustainable way. NOVO Symposium brings together both researchers and practitioners to discuss Nordic insights into health care systems.

We have organized the presentations under four tracks in the symposium:

- Lean management and sustainability
- Major organizational changes
- Innovative health care
- Leadership, quality and culture

We are pleased to welcome you to this year's NOVO Symposium which offers us an excellent opportunity to interact and update our knowledge on Nordic work life research in health care.

We wish you the most innovative and pleasant symposium in Helsinki!

Timo Sinervo & Marjukka Laine

NATIONAL INSTITUTE FOR HEALTH AND WELFARE

Finnish Institute of Occupational Health

NOVO Steering group

Denmark:	**Kasper Edwards, chair**
	Jörgen Winkel
Finland:	**Marjukka Laine**
	Timo Sinervo
Iceland:	**Helga Bragadottir**
	Sigrun Gunnarsdottir, co-chair
	Kristinn Tómasson
Norway:	**Endre Sjövold**
	Frode Heldal
Sweden:	**Gunnar Ahlborg**
	Lotta Dellve

Symposium agenda and timetable

Monday, 25 November 2013

Venue: Main office of Finnish Institute of Occupational Health (FIOH), Topeliuksenkatu 30, Luentosali (Auditorium). Please note that the lobby at Topeliuksenkatu 30 opens no earlier than 8.30 am.

9.00 Registration and coffee

10.00 Opening of the symposium

10.15 Keynote speech by Professor Peter Hasle:
Development of a Nordic model for sustainable systems in healthcare sector – in response to needs from patients, employees and society

11.00 Lean management and sustainability: Multicenter-study
Moderator: Rolf Westgaard

- Winkel et al.: Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in a Lean rationalization process at two Swedish hospitals
- Edwards & Winkel: Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in a Lean rationalizing process at a Danish hospital
- Gunnarsdottir & Birgisdottir: Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in A Lean rationalization process at the University Hospital on Iceland

12.00 Lunch

13.00 Lean management and sustainability
Moderator: Kasper Edwards

- Williamsson et al.: Who are the change agents when hospitals are implementing Lean?
- Ulhassan et al.: Lean management, employees and work processes: Interactions over time in a Swedish hospital
- Eriksson et al.: How motives and context matter for the implementation of Lean in 3 Swedish hospitals
- Reijula et al.: Lean thinking to help improve healthcare facility design

14.00 Coffee

14.30 Organizational changes
Moderator: Sigrun Gunnarsdottir

- Lundström & Edwards: Does list population affect general practice's relational coordination?
- Kokkinen et al.: Does transfer of work from public sector organization to a commercial enterprise without staff reductions increase risk of long-term sickness absence among the staff? A cohort study of laboratory and radiology employees
- Bååthe et al.: Physician experiences from patient-centered team rounding
- Andre et al.: Expectations and desires of palliative health care personnel concerning their future work culture
- Strömgren et al.: The importance of social capital for employees' active work with clinical development and health

15.45 Organizational changes

Moderator: Marjukka Laine

- Andreasson et al.: Health care manager's views and approaches to implementing models for care processes
- Schultz: The future of eldercare: Will it lead to bankruptcy or prosperity?
- Kokkinen et al.: Work ability of employees in changing social services and health care organizations in Finland
- Sormunen et al.: Participatory approach for promoting well-being at work in health-care cleaning services

16.45 Closing, Steering group meeting

18.30 Tour of the Finlandia Hall

A masterpiece designed by the world-renowned Finnish architect Alvar Aalto, Mannerheimintie 13 (http://www.finlandiatalo.fi/en)

19.00 Welcoming toast and symposium dinner

Finlandia Hall, 2nd floor restaurant

Tuesday, 26 November 2013

Venue: Main office of Finnish Institute of Occupational Health (FIOH), Topeliuksenkatu 30, Luentosali (Auditorium). Please note that the lobby at Topeliuksenkatu 30 opens no earlier than 8.30 am.

9.00 Keynote speech by Professor Tuula Oksanen:
The added complexity of resources, employee well-being and the quality of care – results from the Finnish Public Sector Study

9.45 Innovative health care

Moderator: Lotta Dellve

- Hasu: Trajectories of learning in practice-based innovation – Organizational roles at play in sustainable innovation management
- Graeslie et al.: Enhancing cross-understanding: implications for process innovations in hospitals
- Tuomivaara et al.: Promotion of collaborative innovation practices among immediate superiors
- Naaranoja & Heikkilä: Value co-creation in social and healthcare sector - case study

10.45 Coffee

11.00 Innovative health care

Moderator: Johanna Heikkilä

- Sankelo et al.: Innovation practices from the viewpoint of social and health care employees
- Pekkarinen et al.: Psychosocial job resources and participation in professional development during contextual and organizational changes in social and health services
- Sinervo & Pekkarinen: Innovative work behavior and psychosocial factors at work in social and health care

11.45 Lunch

12.45 Leadership, quality, and culture

Moderator: Endre Sjövold

- Dellve et al.: A prospective study of the importance of leadership support for leaders' health-related sustainability and handling strategies
- Aalto et al.: Foreign born physicians in Finnish health care
- Andre et al.: Work culture among healthcare personnel in a palliative medicine unit
- Björn et al.: Prominent attractive qualities of nurses work in operating room departments – a questionnaire study
- von Thiele Schwarz et al.: Making occupational health interventions work in practice – Applying a fidelity framework for understanding adaptations in an occupational health intervention

14.00 Coffee

14.15 Leadership, quality, and culture

Moderator: Gunnar Ahlborg

- Rydenfält et al.: Failure due to work environment and patient safety dilemmas: An evaluation of a seemingly successful intervention to improve efficiency
- Heldal & Sjövold: Patient safety in the ER - having the BEST experience?
- Berthelsen et al.: A validation project of Copenhagen Psychosocial Questionnaire in Sweden
- Ahonen et al.: Patients perception of quality of care in dentistry. The importance of information and treatment from patient's perspective

15.30 Closing of the symposium
16.00 End

Contents

Keynote speaker

Professor Peter Hasle: Development of a Nordic model for sustainable systems in healthcare sector – in response to needs from patients, employees and society

Peter Hasle is a professor at the Center for Industrial Production, Department of Business and Management, Aalborg University. His former positions include a professorship at the National Research Centre for the Working Environment and positions at the Technical University of Denmark, at CASA (independet reserach centre), the International Labour Organization and the occupational health service. Peter Hasle has extensive publications in international journals, books and book chapters. He has also been a keynote speaker at several international conferences.

Peter Hasle's research interests lie in integration of the working environment in management and operation, organizational social capital, organization of working environment programmes, and small enterprises. In the last years, he has taken a special interest in the organization of hospitals and health care among others in combining lean thinking, relational coordination and organization social capital.

Professor Hasle holds a keynote address in the NOVO Symposium on the development of a Nordic model for sustainable systems in healthcare. The Nordic countries have so far been able to develop and maintain an extensive welfare system where key welfare facilities such as healthcare are provided as a right to all citizens. However, the welfare systems are challenged by globalisation and the economic crisis. This is particularly so in the case for healthcare which is facing economic constraints at the same time as the population is ageing, expectations from citizens are growing, new costly medical treatments are marketed, and the employees experience serious work related strain. The Nordic labour markets have a tradition for collaboration between employers and employees among others in applying socio-technical systems where technology and organisation are integrated in such a way that both productivity and well-being of employees benefit. The task is to develop new sustainable systems in healthcare which build on the strength of the Nordic societies at the same time as they meet the contemporary challenges.

Keynote speaker

Professor Tuula Oksanen: The added complexity of resources, employee well-being and the quality of care – results from the Finnish Public Sector Study

Tuula Oksanen, adjunct professor in social epidemiology in the University of Turku, is currently serving as a Team Leader in a research unit for psychosocial factors at the Finnish Institute of Occupational Health. Her background is in medicine and she has worked as an occupational health physician for 15 years. In 2006 she started her research career to better understand the complex association of work and health. After her PhD in 2009, she was appointed as a postdoctoral fellow at Harvard University between 2010-2011. Tuula Oksanen's research has mainly focused on the relationship between the social environment at work and health, and workplace social capital and health in particular. She has also examined other work-related factors such as work stress, organizational justice, job insecurity, and overcrowding and how the social environment outside work, such as neighbourhood disadvantage, affects health. She has published more than 80 papers in international peer-reviewed scientific journals.

The efficiency of delivering services in the public sector is currently in the focus. At the same time, resources in the public sector are reduced and limited. Resources play a role in the quality of services. Resources also influence the well-being of employees. Recent studies have shown that employees' well-being is related to the health of the patients and customers; similarly, the well-being of customers is associated with the employees' health. Tuula Oksanen's keynote will address this complexity of resources, employee well-being and the quality of services delivered.

Lean management and sustainability: Multicenter-study

Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in a Lean rationalization process at two Swedish hospitals

Jørgen Winkel[1,2], Kerstin Dudas[3,4], Ulrika Harlin[5], Caroline Jarebrant[1,5,] Jan Johansson Hanse[6]
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[2] Technical University of Denmark, Department of Management Engineering, Denmark
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[4]Sahlgrenska Academy, Institute of Health and Care Science, Sweden
[5] Swerea IVF, Sweden
[6] Nordic School of Public Health NHV, Gothenburg, Sweden

Introduction

Lean is used in healthcare as a tool for business development and rationalization. Lean aims at contributing value from a holistic perspective including reduction of waste. Previous research indicates that this often creates work intensification with possible negative implications for the working environment (WE). WE considerations generally take a back seat on the rationalization process and are most often introduced later in a separate process. This paper reports findings from the Swedish part of a Nordic Multicenter Study where WE considerations have been integrated into a rationalization process based on Value Stream Mapping (VSM). ErgoVSM incorporates aspects of the physical and psychosocial WE into the VSM process. The abstract presents pros and cons for using ErgoVSM in relation to VSM at 2 wards at 2 different hospitals based on some of our preliminary data.

Material and Methods

The case ward ("Ca") used the ErgoVSM tool and the control ward ("Co") the VSM tool. The resulting Action Plans were analyzed regarding number of suggested interventions and expected impact on performance (P) and WE. The expected WE impact was finally categorized according to impact at "Task", "Work Content" and "Work Situation" (Westlander 1993). Two of the present researchers made these assessments independent of each other followed by a consensus procedure.

Results

The Action Plan from Ca comprised 37 and Co 22 interventions. For both wards 65% of the interventions were expected to improve both P and WE. However, for Ca none of the interventions were expected to imply negative or no impact on WE, while this was 23% for Co. For Ca 16% of the interventions concerned Tasks, 46% Work Content and 38% Work Situation. The corresponding results for Co were 55%, 36% and 9% respectively.

Conclusions

The Ca ward suggested more interventions, none of these with expected negative impact on WE and the suggestions were more often at a system rather than task level. The present preliminary data suggest that the ErgoVSM tool facilitate development of an Action Plan that may result in higher organizational sustainability compared with VSM.

Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in a Lean rationalization process at a Danish hospital

Kasper Edwards[1], Jørgen Winkel[1,2]
[1]Technical University of Denmark, Department of Management Engineering, Denmark
[2] University of Gothenburg, Department of Sociology and Work Science, Sweden

Introduction

Lean is used in healthcare as a tool for business development and rationalization. Lean aims at contributing value from a holistic perspective including reduction of waste. Previous research indicates that this often creates work intensification with possible negative implications for the working environment (WE). WE considerations generally take a back seat on the rationalization process and are most often introduced later in a separate process. This paper reports findings from the Danish part of a Nordic Multicenter Study where WE considerations have been integrated into a rationalization process based on Value Stream Mapping (VSM). ErgoVSM incorporates aspects of the physical and psychosocial WE into the VSM process. The abstract presents pros and cons for using ErgoVSM in relation to VSM at 2 wards at Odense University Hospital based on some of our preliminary data.

Materials and Methods

The case ward ("Ca") used the ErgoVSM tool and the control ward ("Co") the VSM tool. The resulting Action Plans comprised interventions, which were categorized according to impact at "Task", "Work Content" and "Work Situation" levels (Westlander 1993) and each amendment was analyzed by a researcher regarding expected impact on performance (P) and WE.

Results

The Action Plan from Ca comprised 25 interventions and from Co 18 interventions. For Ca 48% of the interventions focused on performance and the corresponding result for Co was 61%. For Ca one of the interventions was expected to imply negative impact on both WE and P, and none for Co. The Action Plan of Ca comprised 44% interventions with expected positive impact on work environment and for Co 61%. For Ca 60% of the interventions concerned Tasks, 12% Work Content and 28% Work Situation. The corresponding results for Co were 39%, 28% and 33% respectively.

Discussion and Conclusions

Ca generated more interventions than Co. Co had more interventions focused on performance supporting the hypothesis that VSM in general is more performance oriented. However, Co had more interventions with expected positive impact on WE, contradicting the hypothesis that VSM promotes P rather than WE. However, the expected WE improvements were mainly due to improved role clarity e.g. better description of and responsibility for tasks, which is also important for improving P.

Ergonomic Value stream Mapping (ErgoVSM) – potential for integrating work environment issues in a Lean rationalization process at the University Hospital on Iceland

Sigrún Gunnarsdóttir[1], Birna Dröfn Birgisdóttir[2]
[1] University of Iceland, Iceland
[2] University of Reykjavík, Iceland

Introduction

Lean is used in healthcare as a tool for business development and rationalization. Lean aims at contributing value from a holistic perspective including reduction of waste. Previous research indicates that this often creates work intensification with possible negative implications for the working environment (WE). WE considerations generally take a back seat on the rationalization process and are most often introduced later in a separate process. This paper reports findings from the Icelandic part of a Nordic Multicenter Study where WE considerations have been integrated into a rationalization process based on Value Stream Mapping (VSM). ErgoVSM incorporates aspects of the physical and psychosocial WE into the VSM process. The abstract presents pros and cons for using ErgoVSM in relation to VSM at two wards at Landspítali hospital Reykjavík based on some our preliminary data.

Material and Methods

The Landspítali hospital initiated introduction of Lean late 2011. February 2013 the General emergency ward (case group, „Ca“) and the Childrens emergency ward (control, „Co“) voluntered to participate in the present study. Both wards were introduced to VSM according to the standard lean practice at the hospital. Ca was then introduced to the Ergo-part of the VSM tool. The present results are based on observational notes and minutes from group meetings during the period of creating current and future states at both units.

Results

Co needed 6 meetings comprising 9.7 hours in order to create the „Present“ and „Future States“ as well as the final „Action Plan“. Co mainly focused on topics relating to process and performance issues, patients perspectives, and contacts with services outside the unit. Ca has so far had 7 meetings comprsing 12,6 hours. More work is needed for creating the Future State and the Action Plan. The group has also focused on WE issues as this is part of the ErgoVSM procedure. Among topics disscussed are work demands, stress related to work tasks, poor communication, lack of clarity in relation to power and influence of professional groups (nurses and doctors). These issues are discussed as an integrated part of the process towards creating the Action Plan.

Conclusions

The ErgoVSM method used by Ca seems to offer an acceptable usability for the employees towards their integration of WE and performance issues. However, more time is needed to create the Action Plan.

Who are the change agents when hospitals are implementing Lean?

Anna Williamsson, Andrea Eriksson, Lotta Dellve
School of Technology & Health, Royal Institute of Technology, Sweden

Introduction

A majority of Swedish health care organizations have lately taken on and translated the industrial concept of Lean production to their own context. Research concerning lean in health care has focused on effects in production, patient flow and efficiency. Little is known about how added resources in form of key functions (KF) contribute to the change process. The aim of this study is to explore who the change agents (CA) are; including what remit and impact they have when implementing lean in the hospital setting.

Method

Three Swedish hospitals with the outspoken intention of working with organizational development (OD) according to a lean-inspired concept, has been studied. The hospitals differ concerning experience from OD work and demographics. 55 interviews with top management, assigned KFs, health care developers, first and second line managers and professional wise focus groups were conducted. Qualitative content analysis of the interviews was combined with analysis of the hospitals' own OD documentation. KF assigned to work with OD and functions affecting OD were put in to hospital wise socio-gram.

Results

The results show great differences in the work and the impact between the formally assigned KFs and local lean champions. The hospitals show similarity in their goals of making their regular managers into change leaders by using CAs. Commonly the top managements points out formally assigned KFs' in their organizations. However, the placement level of KFs differs between the hospitals and so does remit and responsibility for the implementation drive. Local improvements initiated by health care professionals are often run by local lean champions unaware of the assigned KF. Commonly between the hospitals, the KFs' work is affected by driving forces on the hospital floor and by changing directions from top management. A KF-run project's success depends on the KF's legitimacy among and involvement of the health care professionals on the hospital floor. Their legitimacy however may be limited by their geographic location, formal assignment, organizational conditions and own competence.

Conclusions

The KFs depends on their legitimacy on the floor and their remit given from top management to have impact on the change. The function with remit, legitimacy and therein impact, have the potential to be the real CA.

Lean Management, employees and work processes: Interactions over time in a Swedish hospital

Waqar Ulhassan[1], Johan Thor[1], Hugo Westerlund[2], Christer Sandahl[1], Ulrica von Thiele Schwarz[1]
[1] Medical Management Center, Karolinska Institutet, Stockholm, Sweden.
[2] Stress Research Institute, Stockholm University, Stockholm, Sweden.

Introduction
As health care struggles to meet increasing demands with limited resources, Lean Management is becoming a popular management approach. Despite the reported success of Lean in healthcare, it is unclear why and how organizations adopt Lean. Lean in healthcare often is studied in relation to operational rather than socio-technical aspects of Lean. The empirical evidence as to how Lean interacts with teamwork and the psychosocial work environment is somehow scarce. This project, including several studies, aimed to study the antecedents and characteristics of Lean implementation at a Swedish Hospital. Furthermore, the changes in certain socio-technical aspects of Lean, i.e. teamwork and psychosocial work environment, were studied over time.

Method
Three Swedish hospitals with the outspoken intention of working with organizational development (OD) A case study design was used including interviews, observations and document studies. Teamwork and the psychosocial work environment were measured at two times (T1 & T2), one year apart, with valid questionnaire employee survey during Lean implementation. The qualitative data analysis yielded information about the Lean implementation. The enriched qualitative information about intervention and the context was used to predict expected change patterns in teamwork and the psychosocial work environment from T1 to T2 and subsequently compared with questionnaire data through linear regression analysis.

Results
Previous improvement efforts may facilitate the introduction of Lean. Contextual factors seemed to influence both Lean implementation and its sustainability. For example, adoption of Lean varied with the degree to which staff saw a need for change. Continuous improvement and visual management may help to sustain Lean by keeping the staff engaged and committed. Employee involvement in Lean implementation may minimize the intervention's harmful effects on psychosocial work factors. Lean may affect teamwork but more prominently in relation to structural and productivity issues. Practitioners should note that, with groups struggling with initial stages of group functioning, Lean may be very challenging.

Conclusions
The success of Lean implementation is contingent upon its adaptation to the contextual factors. The initial Lean success may be sustained through keeping the staff engaged in change process using continuous improvement combined with visual management. The harmful effects on psychosocial work factors may be avoided by ensuring the active employee participation in the Lean change process.

How motives and context matter for the implementation of lean in 3 Swedish hospitals

Andrea Eriksson, Anna Williamsson, Lotta Dellve
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Introduction

A majority of Swedish hospitals have these last years introduced the organizational concept lean production. Knowledge of outcomes of lean is lacking. Possibilities for lean to contribute to sustainable organizational development depend on many different factors including motives and rationales for implementing lean, strategies for how to implement lean as well as the implementation context. The aim of this study was to analyse how different motives for lean, as well as the implementation context, impact how three Swedish hospitals arrive at their lean strategies.

Method

A case study of three hospitals was performed. Criteria's for choosing hospitals included being in an early phase of implementing lean. 55 key actors including top managers, unit managers, administrators and change agents were interviewed. Qualitative content analysis was performed. Results from surveys to employees were used in order to confirm the results from the content analysis.

Results

Different financial circumstances, maturity for lean and views of how to reach out to key actors impacted the hospitals strategies for lean. Central for Hospital 1 was to find strategies for how to teach and support employees in principles for systematic development work. This was connected to being a smaller hospital with low maturity for organizational development. Major for Hospital 2s strategies was to have high impact through an extensive education program and through extensive involvement of managers. This can be seen in the light of a huge budget deficit and a high maturity for organizational development. Strategies of Hospital 3 focused on involving clinicians in best practice projects and support from central change agents. This was related to aims of integrating county council strategies, including increasing actual collaboration between clinical and strategically work.

Conclusions

Motives and context matter for how lean is implemented in different hospitals. The three studied hospitals arrived at very different strategies for implementing lean, including different ways of how to involve key actors in the implementation. The different strategies will probably impact the extent to which lean actually will be implemented in the different hospitals, as well to which extent the implementation of lean is in line with sustainable organizational development.

Lean thinking to help improve healthcare facility design

Jori Reijula[1], Marjaana Lahtinen[1], Virpi Ruohomäki[1], Nina Nevala[1,2], Kari Reijula[1,3]
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[3] University of Helsinki, Hjelt Institute, Helsinki, Finland

Introduction

This paper examines the possibilities and challenges of Lean design in modern healthcare facilities. Today's healthcare facilities are all too often outdated and in desperate need of renovation. Due to regressed economy in most of the developed countries, financial resources among healthcare are limited and thus a demand arises for improved work process efficiency, safety and employee well-being. New ideas among healthcare design are urgently sought after. Lean thinking has shown promise in work process optimization and could also have potential to enable more efficient and user-centric design of healthcare facilities.

Material and methods

The present study included a literature search of over 100 research papers, topics of which discussed i.e. Lean management and its use in healthcare implementation and design projects.

Results

According to the collected data, there are numerous examples of Lean implementation projects that have been carried out in hospitals with up-and-running healthcare processes. The results have usually shown targets which could be improved leading to more efficient processes and this has increased the popularity of Lean among healthcare. However, there are only few Lean implementation projects, wherein Lean has been used as a tool for healthcare facility planning and design. On the other hand, Lean would seem to incorporate several tools to answer many of the challenges facing modern healthcare designers. The customer-driven philosophy sees the facilities' users as integral elements of the facility design and could thus help emphasize the employee perspective.

Conclusions

Improved design methods are promptly needed to help create efficient and user-centric healthcare facilities. Lean thinking has been successfully implemented into several healthcare organizations, and might thus provide a much needed approach for enhanced healthcare facility design. Lean offers a wide range of tools – many of which seem fitting to solve relevant design problems for today's healthcare designers. However, "going Lean" requires the hospital managers and the staff to embrace Lean ideology. This requires patience, commitment and longevity; which means noticeable results may take years to take place. Nevertheless, with full dedication, Lean is more than likely to significantly improve work process efficiency, safety, and employee well-being in healthcare facilities.

Organizational changes

Does list population affect general practice's relational coordination?

Sanne Lykke Lundstrøm, Kasper Edwards
DTU Management Engineering, Denmark

Introduction

General practices are faced with a series of growing demands – from changing needs of an aging population, to the increasing demands to comprehensively manage and coordinate patients' care. Time and teamwork are becoming an inadequate resource, and all members of a general practice must collaborate in new ways, involving sharing both tasks and an underlying cultural framework in an effort to meet the growing demands. On of the theory used to foster collaboration in an organisation is relational coordination (RC). RC is coordinating work through relationships of shared goals, shared knowledge and mutual respect. Higher levels of relational coordination produce higher levels of quality and efficiency performance, fewer dropped balls and less wasted effort. RC also improves job satisfaction by making it possible for team members to effectively carry out their job and by providing the social support they need. The people living in close proximity to a general practice comprise the general practitioners (GPs) list population. Gender and age of the individuals on a GPs list may serve as an indicator for the actual need for health care in a list population. A large list size and a high need for health care would mean a greater need for teamwork in a general practice.

The aim of this study is to access the association between list populations and relational coordination.

Material and methods

The study is a qualitative study based on a questionnaire survey, which measures RC as a network of communication and relationship ties among and between different professions involved in a common work process. RC data is combined with register data from Danish Quality Unit of General Practice (DAK-E).

Results

Data is being analysed as we speak.

Conclusions

A general practice with a list population with a high need for health care and a low relational coordination can lead to burnout among the staff and an un-effective use of the resources with in the general practice. RC could help build a more sustainable general practice by preventing burnout, improving job satisfaction and help general practice utilise its resources.

Does transfer of work from a public sector organisation to a commercial enterprise without staff reductions increase risk of long-term sickness absence among the staff? A cohort study of laboratory and radiology employees

Lauri Kokkinen[1], Marianna Virtanen[1], Jaana Pentti[1], Jussi Vahtera[1,2], Mika Kivimäki[3,4]
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[2] Department of Public Health, University of Turku and Turku University Hospital, Turku, Finland
[3]Department of Epidemiology and Public Health, University College London, London, UK
[4] Department of Behavioral Sciences, University of Helsinki, Helsinki, Finland

Introduction
Privatisations of public sector organisations are not uncommon in order to increase efficiency. Some studies suggest that such organisational changes may adversely affect employee health. In this study, we examined whether transfer of work from public sector hospital units to commercial enterprises, without major staff reductions, was associated with an increased risk of long-term sickness absence among employees.

Material and methods
A cohort study of 962 employees from four public hospital laboratory and radiology units in three hospitals which were privatised during the follow-up and 1832 employees from similar units without such organisational changes. Records of new long-term sick leaves (>90 days) were obtained from national health registers and were linked to the data. Mean follow-up was 9.2 years.

Results
Age- and sex-adjusted HR for long-term sickness absence after privatisation was 0.83 (95% CI 0.68 to 1.00) among employees whose work unit underwent a change from a public organisation to a commercial enterprise compared with employees in unchanged work units. Further adjustments for occupation, socioeconomic status, type of job contract, size of residence and sick leaves before privatisation had little impact on the observed association. A sensitivity analysis with harmonised occupations across the two groups replicated the finding (multivariable adjusted HR 0.92 (0.70–1.20)).

Conclusions
In this study, transfer of work from public organisation to commercial enterprise did not increase the risk of long-term sickness absence among employees.

Physician experiences from patient-centered team rounding

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[3]Sahlgrenska University hospital, Göteborg, Sweden

Introduction
Rounding has long traditions within healthcare as a way to organize the physicians led and ward based part of the cure and care process, i.e. examination, diagnosis, treatment and follow-up of treatment. The centrality of rounding for healthcare is undisputed. However, despite an emphasis on principles of professionalism and humanism, and the need to increase patient focus in medicine, there have been few reported experiences from actually applying these principles to ward rounds. In this study we explore how physicians experience the introduction of a multi-professional patient-centered round, in a Swedish internal-medicine department.

Material and methods
Our qualitative analysis of 14 transcribed physician interviews provided a rich understanding of how physicians experience adhering to a pre-defined rounding structure, with a patient-centered and team based foundation.

Results
We are still analyzing the material so the following are indications: The flavor of physician experience seems to be closely linked to how the individual physician understands his/her role as physician. The new rounding principles increase the need for interdependent activity coordination and seem to impact physician autonomy and challenge professional identity. There are emerging patterns in the data about a need for physicians to develop conversation strategies to better manage the new and more equal physician-patient relation.

Conclusions
How a round should be carried out seem to be closely linked to how each person construct their professional identity as a physician. The introduction of pre-defined rounding principles reduces individual physician autonomy and challenged facets of professional identity. Challenges of professional identity can arouse anxiety and resistance towards a change. The result of this is something that should be taken into consideration by management of change initiatives in healthcare, to facilitate engagement.

Expectations and desires of palliative health care personnel concerning their future work culture

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Introduction

Exploring the work culture of health care personnel is important in order to understand the challenges they face and the issues they experience. Believing in and shaping their futures indicates a working culture influenced by promoting factors. The aims of this study were to explore how health care workers at a Palliative Medicine Unit perceive their future work culture would be and whether they perceive that their expectations and desires will be fulfilled.

Methods and design

We conducted a correlational study. Health care personnel, physicians, nurses, physiotherapists, and others (N = 26) at a PMU in Norway completed a questionnaire according to the two perspectives concerning their work environment: expectations (future) and desire (wish). The findings in these two perspectives were compared. The method seeks to explore what aspects dominate the particular work culture and identifying challenges, limitations, and opportunities. The findings were also compared with a reference group of 347 ratings of well-functioning Norwegian organizations, named the "Norwegian Norm".

Results

The findings for the wish perspective showed significant ($p<0.05$; $p<0.01$) higher rates for nurturing and synergy dimensions and significant lower rates ($p>0.05$; $p>0.05$) for opposition and control dimensions than the findings for the future perspective.

Conclusions

It appears that the health care personnel wish for changes that they don't believe they will achieve. The changes the respondents wish for are fewer negative work culture qualities, such as assertiveness and resignation, and more positive work culture qualities, such as engagement and empathy. Changes must be made to give the health care personnel improved working conditions and empowerment in order to change their situations to reflect what they wish for. The present findings can give an indication as to the direction that research ought to follow in subsequent studies.

The importance of social capital for employees´ active work with clinical development and health

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Introduction

Social capital can function both analogue and as a complement to other forms of capital. To accept and strengthen social capital in health care can be a crucial resource to sustainable organizational development. There's both structural and cognitive aspects of social capital i.e. trust and social participation. Social capital could be manifested in healthcare staffs trust in that efficiency attempts are made in cooperation to a common interest. The aim is to investigate the importance of social capital for healthcare professionals' active work and engagement in organizational development, as well as for their general work engagement and job satisfaction.

Material and methods

A cross-sectional study based on a survey to professionals (physicians, nurses, assistant nurses) in selected units at five Swedish midsize hospitals. The number of respondents was 877 and the data were analyzed by univariate and multivariate regression analysis, at individual and work-unit level. Social capital was operationalized as social reciprocity, vertical- and horizontal trust, vertical justice and organizational trust and respect.

Results

Social capital was associated with health care professionals, general work engagement and job satisfaction. Analysis at individual-level showed positive associations between all measured aspects of social capital and an active work-unit engagement in patent safety activities, work to improve quality of care and self-rated health. Social capital at unit-level showed positive associations between a unit's active work with patient safety and with the work to improve quality of care. In units where the amount of vertical trust and organizational trust and respect were high there were less engagement to work with continuous improvements and high engagement in the work with increased patient safety and quality of care.

Conclusions

It seems that the cognitive part of social capital, vertical trust, has an influence in engagement and participation in organizational development. Social capital is strongly related to job satisfaction and active work with clinical development. The findings contribute to a deeper knowledge of social capital as a factor which may influence patient-safety, quality of care and health among healthcare staff.

Health care manager's views and approaches to implementing models for care processes

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Introduction
Previous research about organizational development in health care indicates that the kind of implementation can affect the outcome, and that the leadership is of a great importance for how the implementation is conducted. This article aims to focus managers' views and approaches in organizational developments of care processes and their strategies to increase employees' engagement in development of care processes.

Materials and methods
In-depth interviews with first and second line managers (n=30) in five Swedish hospitals were analyzed in line with constructivist Grounded Theory.

Results
The results describes managers positive view and expressed necessity to work with development of care processes, and their shared experience of challenges related to organization structures and demands. Experiences of success in implementing methods for care processes include to manage to motivate and get the employees engaged in this work. "Mindful coaching of participation" emerged as central for managers to elicit this participation and handle top down initialized process development. The vertical approach was to sustaining integrity in adaptation and translation. The horizontal approaches were stepwise and negotiating and building participation, including to introducing silently, pushing and pulling to create interest, encouraging trial and error and empowering for solving the developments by sharing or dumping. The managers' were translating and repackaging the model of process development to create interest and to be received with acceptance by the employees.

Conclusions
Implementation of care processes needs a supportive and coaching leadership built on close manager-employee interaction, a mindful implementation regarding pace at clinical levels as well as dedicated managers with competence to share responsibilities with teams and engaged employees with competence to share responsibilities over care processes. This also requires organizational supports in terms of provide time to work with development as well as support through organizational structures that assist work in process oriented way. The result can be used to increase understanding of challenges in implementing and limitations in legitimacy among both operative managers and working teams.

The future of eldercare: Will it lead to bankruptcy or prosperity?

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Introduction

Norway, like many other countries, is experiencing a rapidly growing aging elder population. However, this is a type of growth that has not yet been seen before. By 2027, the elderly population, aged 65 or older, is expected to more than double, which could account for nearly twenty five percent of the Norwegian population. The message is clear, something has got to be done; either reducing our standards for providing for the elderly, or to innovate to maintain or increase the current level of care. Through innovation we need to not only cut labor costs and relieve demand on current facilities by increasing efficiency. Additionally, we need to increase the quality of elder care. In this case, that will mean through innovative solutions the elderly will feel more self-reliant and thus decrease atrophy and increase their quality of life.

Material and methods

I'm researching the current innovative solutions developed by municipalities, the processes that led to the innovations, and how innovation processes in the municipalities can be improved. Currently, I have conducted two interviews; one with a large municipality and one with a small municipality (this is a part of my larger overall project). The results in innovation between the two municipalities were quite divergent. There have been drastic innovative initiatives in the small municipality; while there have been little innovative initiatives from the larger municipality. Innovation from the large municipality was quite limited due to conflicting relationships and interests between many different parties, while innovation in the smaller municipality was only limited by individual motivation.

Conclusions

There seems to be a delicate balance between enabling innovative leadership and a having the appropriate level of bureaucracy. Although innovative leadership is a necessary catalyst to innovation, there is much research that shows too much autonomy can lead to isolation. Bureaucracy has generally been a stigmatized word signaling inefficiency; however an appropriate amount of bureaucracy might just be the glue that holds enabling innovative leadership together. I will be continuing my case studies to understand what innovative solutions have been developed, the processes that led to them, and how these processes can be improved.

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Work ability of employees in changing social services and health care organizations in Finland

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Introduction

The Finnish social and health care system was created mainly during the 1960s and 1970s, and its institutional structure has remained relatively unaltered until today. On the level of individual organizations, however, there have been rapid changes for quite some time now. Both the service production structures and the organization of labor have been under constant development in order to increase efficiency and enhance the quality of care. In this study, we examined the connection between organizational changes and employees own evaluations of their work ability.

Material and methods

In early 2010, we asked employees (n = 2429) working in the Finnish social services and health care industry to identify all the organizational changes that had occurred at their workplaces over the previous two years, and to evaluate their own work ability and whether different statements related to the elements of work ability were true or false at the time of the survey. For our method of analysis, we used logistical regression analysis.

Results

In models adjusted for gender, age, marital status, professional education and managerial position, the respondents who had encountered organizational changes were at a higher risk of feeling that their work ability had decreased (OR = 1.49) than the respondents whose workplaces had not been affected by changes. Those respondents who had encountered organizational changes were also at a higher risk of feeling that several elements related to work ability had deteriorated. The risk of having decreased self-evaluated work ability was in turn higher among the respondents who stated they could not understand the changes than among those respondents who understood the changes (OR = 1.99). This was also the case among respondents who felt that their opportunities to be involved in the changes had been poor in comparison to those who felt that they had had good opportunities to be involved in the process (OR = 2.16).

Conclusions

Our findings suggest that the organizational changes in social and health care may entail, especially when poorly executed, costs to which little attention has been paid until now. When implementing organizational changes, it is vital to ensure that the employees understand why the changes are being made, and that they are given the opportunity to take part in the implementation of these changes.

Participatory approach for promoting well-being at work in health-care cleaning services

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Introduction

Musculoskeletal symptoms and overuse injuries are a common problem in professional cleaning work. Cleaning work is characterized by such physical risk factors as awkward working postures, application of high forces and repetitive upper extremity movements. In addition, cleaning workers sometimes have to adapt to unexpected situations or to modify their work along with other stakeholders. Supportive work community, healthy and safe working environment and adequate work equipment and training on how to use them correctly are important factors that enhance well-being of workers. The objective of the study was to promote the well-being and working capacity, by ergonomics intervention, in the healthcare cleaning services of one hospital district in Finland.

Material and methods

Ergonomics intervention in the healthcare cleaning services involved three parts (a) questionnaire focusing on workers' health, occupational competence, and physical and psychosocial stress factors (n=220), (b) focused work-place survey on ergonomic aspects, in two hospital wards, based on observation and interviews, and (c) training and education material for promoting employees working and functioning ability. Feedback of the contents of the training sessions and good ergonomics solutions in use were collected from the participants (n=83 workers). The intervention was planned to enhance the involvement of working community in their daily work and in the design and development of working methods. This approach of participatory ergonomics has been shown to have several advantages in work development processes.

Results

Musculoskeletal problems, as reported in the low back region, in the upper and lower extremities, seemed to result in the decrement of self-assessed working capacity. Well functioning working community, colleagues and the feeling of success in work were reported being important ways of maintaining and promoting the well-being of the employees. During the study, 41 practical solutions for working methods, equipment and co-operation with the other stakeholders (e.g. nurses, technical stuff and kitchen workers) were collected.

Conclusions

A participatory approach can be regarded as a relevant method of enhancing workers' well-being and working conditions in health care cleaning services. The results can be used as a training material and familiarization of new workers in healthcare cleaning services.

The project was financed by the Finnish Funding Agency for Technology and Innovation (TEKES) and Finnish Institute of Occupational Health.

Innovative health care

Trajectories of learning in practice-based innovation - Organizational roles at play in sustainable innovation management

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Introduction

Although the concept of innovation is increasingly adopted in the development of public services, there is a lack of knowledge of innovation-related learning practices as well as innovation management models in public organizations. Neither traditional top-down development approaches, nor private sector management models which allocate development activities to specialized professionals, are not directly suitable. Practice-based innovation, which refer to the employees' or management's renewal of their own operations (new working methods, routines, products or services) based on informal learning through work processes, is fruitful in service contexts, in which mundane interactions between front-line employees and service users during service delivery and service encounters are crucial source of innovative ideas. Nevertheless, we still lack in depth studies of how mundane work processes and service interactions can facilitate innovation processes and hence support practice-based innovation in public services. The existing literature does not say how such innovation actually occurs and evolves, and how different organizational and user roles become successfully involved in service innovation processes and implementation. In particular, current studies do not describe reciprocity and shifts of participant roles that constitute preconditions for learning outcomes and the ensuing service novelty and sustainability.

Material and methods

The proposed paper analyzes learning trajectories and participant roles of service innovations in seven Finnish public sector organizations representing different service domains, for instance in elderly care and day care services for children. The study applies qualitative case study strategy. In-depth interviews were conducted among various personnel groups. In addition, service users were interviewed.

Results

Three basic learning trajectories of practice-based innovation were found, characterizing the origin of innovation: (1) Goal-based or directed (top-down), (2) practice-based (bottom-up), and (3) mixed (simultaneously goal-based and practice-based) innovation trajectory type. Organizational roles at play are characterized in each type: upper management role, line manager role and employee role.

Conclusions

A typology of innovation-enhancing actions related to different organizational roles is proposed, suggesting the mutual adjustment and strengthening of the simultaneous bottom-up and top-down learning in innovation across organization in order to better sustain innovations. It is argued that, although practice-based innovation is crucial founding element in each new innovation endeavor, it is complemented with or nuanced by other elements such as user-based innovation and employee-driven innovation. Innovation management models which take account variety of participant roles and actions at play should be developed and implemented.

Enhancing cross-understanding: Implications for process innovations in hospitals

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Introduction

The healthcare sector has undergone tremendous changes in terms of medical and technologic developments the past century, and innovation has become a critical capability of all healthcare organizations (Länsisalmi, Kivimäki, Aalto, &Ruoranen, 2006). However, an equivalent and sufficient increase in hospital productivity is still missing. As Mintzberg and Glouberman (2001) state, "[w]e end up with 2000s technologies embedded in 1940s structures", missing out on attractive opportunities for radical new practices.

Although process innovations are assumed to bring multiple benefits to an organization, such innovations have for many organizations been adopted without much success. Studying the implementation of Business Process Reengineering in 216 US and Canadian hospitals, Ho, Chan, and Kidwell (1999) found that most process reengineering efforts had limited success in accomplishing the desired objectives. Baer and Frese (2003) suggest that the problems such organizations are facing may be a result of critical contingencies that complement these innovations not being in place, such as organizational structure, culture, and climate.

Hospitals often implement new practices that are focused on tasks and patient flow in order to increase efficiency. However, changes in practices and the level of outcome are especially challenged by communication problems because of status hierarchies. Greater gains may arise from blurring the boundaries between routines, requiring a decrease in status difference in such strong culture and complex organizations. This implies an importance of creating process innovations that increase the ability to utilize member diversity in these multidisciplinary teams.

Material and methods

This paper examines a successful implementation of a process innovation in a surgical department, which resulted in a 40 % increase in operations per operating room. Interviews of participants from all disciplines were conducted.

Conclusions

In conclusion, this paper highlights the importance of implementing process innovations that not only focus on the tasks associated with patient flow, but also emphasizes the process of socialization and the enhancement cross-understanding between all participants. This will decrease status difference, ease implementation, and create better efficiency outcomes in surgical teams.

Promotion of collaborative innovation practices among immediate superiors

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Introduction

Public sector services must be produced more efficiently and qualitatively because of decreasing resources and increasing demands of users. In social- and healthcare sector this means reforms in organisations, processes and work practices. These innovations are generated and put into practice together with customer, employee and management. The main stream of organisational innovations has been carried out as top-down procedure. However, research has shown that innovation in services also take place ad hoc. Therefore innovations are not always intended and they can sometimes be noticed only afterwards. The bottom-up innovation emerges through incremental development of everyday work.

The challenge is how these ad hoc solutions made by employee can integrate to the organisational development and take account in the innovation management practices. The other challenge is to take into use top-down implemented ideas. In responding those challenges immediate superiors are mediators and facilitators and they need special competencies to handle the task. (Fuglsang and Sörensen 2011.)
We are going to present a method to promote the collaborative innovation practices through immediate superiors leading acts. We introduce the method where immediate superiors analyses own and workgroups action to make visible the developmental actions in everyday work. The aim is to advance the competencies of immediate superiors to facilitate and manage collaborative innovation practices.

Material and methods

We report the results from case-study from Osuva-project (Collaborative innovation and advancing its management). The data comes from the developmental workshops, where leadership practices were analysed and the results of the study were reflected together with immediate superiors. The immediate superiors were from municipal social and health care units. The data consist of observations and recordings of four workshop sessions and the materials used and produced. The investigative workshop practices will be analysed qualitatively via theoretical framework based on organisational sensemaking by Weick.

Results and conslusions

As a result there will be a description of a procedure and tasks of the workshops. We will get a picture of a process which promotes collaborative innovation practices. Also we analyse the used methods to develop practices. The goal is to find a workable solution to the challenge of the management of bricolage.

Value co-creation in social and healthcare sector – case study

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Introduction

Value co-creation has been seen in industry as a main approach when the needs of stakeholders are managed. This paper describes the use of this approach in a social and health care setting. The aim of co-creation is to enhance organisational knowledge processes by involving the customer in the creation of meaning and value (Coates 2009). Ramaswamy & Gouillant (2008) argue that Experience Co-Creation is important because: customers today are more knowledgeable, more demanding, less passive, and more connected; products and services are more readily imitable—and commoditization erodes customer loyalty.

Material and methods

This paper is based on a data from action research in home services. The used method is case study. This research is a part of a larger Osuva-project where action studies and a survey are combined in a multicenter study. The aim of Osuva is to search new methods to manage and lead the collaborative innovation process, which enable participation of personnel, clients and service providers.

Results

The units that give the home services have been located in several facilities and each unit (social service, home care, home nursing, and e.g. physiotherapy) are managed by their own manager. The lack of co-creation of value has resulted e.g. that the visits from different units happen randomly. The patients give the wish of having visits on regular basis. The units need to co-create value for the patients. The head nurse proposed that a good starting point is to share the facilities since the co-creation needs continuous communication. The co-creation of value approach is leading the service system to closely collaborate with different units but also with the patients.

Conclusions

The use of co-creation approach is a new paradigm in social and health care giving new ways of collaborating with the patients and other units. When we look at the service system development for patients at home we find that the interaction with them is based on the contacts with the service providers. The system needs to be built by improving the knowledge sharing between the nurses, homecare personnel and social service providers. The voice of the patient in this system is central part in developing the quality of care.

Innovation practices from the viewpoint of social and health care employees

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Introduction

One possibility to promote innovation capacity in public social and health care is employee-driven innovation. It means that employees are given regular opportunities to bring out their new ideas concerning their work and services for customers. Business research has clearly shown that active participation of staff in innovation process enhances growth, revenues and efficiency. It also adds wellbeing at work. There is not much research on how superiors support employees in participation in innovation process or what employees themselves think about innovation as part of their job.

The aim of this study is to find out 1) How the employees in social and health care in Finland estimate innovation practices and management of them?, 2) How they assess own participation in innovation?, and 3) How age, education, job stability and working time are related to the assessments?

Material and methods

This study is part of research project OSUVA (2012-2014) funded by TEKES. Net survey was carried out in the year 2012. 6494 persons from 7 social and health care organizations were invited and 2282 participated in the study. The response rate was 35%. Most participants were female (92 %) and in age 55-65 (26 %) or 35-44 (23 %). The data was analysed by SAS-statistical program version 9.3 by using frequency and percent distributions, sum variables and analysis of variance.

Results

The mean of sum variables measuring superiors' innovation related support activities, their role in innovation process, development practices in work places and the employees' own innovation activity varied from 3.19 to 3.30 (scale 1-5). Young age, low education level and day time work were positively related to the means of most sum variables. Scientific education did add own innovation activity.

Conclusions

There are obstacles which prevent employees' participation in innovation in public social and health care. Many of them could be removed by development of management and leadership but there is also a need for employees themselves to be more active innovators as part of their daily tasks.

Psychosocial job resources and participation in professional development during contextual and organizational changes in social and health services: do fair organizational procedures and trust promote participation?

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Introduction

In Finland, social and health services have gone and are expected to go through large contextual and organizational changes. It has been suggested that these changes bring about co-operational difficulties and stress. However, little is known about how these changes affect employees' professional development. This study investigates the associations of contextual and organizational changes to employees' psychosocial job resources (team climate, organizational justice and trust) and participation in professional development. The impact of organizational justice and trust on participation is further analyzed.

Material and methods

The cross-sectional survey data for this paper were drawn from 2266 employees working in 6 social and health care organizations in Finland in 2012. Psychosocial job resources included measures of team climate, procedural and relational justice, and trust. Professional development was measured in terms of participation in educational programs, supervision, development projects or professional networks. The associations were analysed using standard statistical methods, including general linear models. The survey was conducted as part of *Osuva*-project where a multicentre study combined 4 action studies in addition to the survey.

Results

Majority of the respondents had gone through large contextual or organizational change (n = 1888) which had a significant impact on their psychosocial job resources and participation in professional development. Professional development, in turn, was related to organizational procedures and trust.

Conclusions

The results suggest that in order to maintain professional development after organizational changes, it is important to secure the psychosocial job resources of the employees. In particular, fair organizational procedures and trust may reinforce participation in development.

Innovative work behavior and psychosocial factors at work in social and health care

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Introduction

Social and health care services are facing major organizational changes and severe economic challenges in Finland. In organizational changes it's a challenge, how to create innovative work methods and processes. Changing organizational structures does not automatically lead to more efficient service production. Frequently organizational change is a top down process where innovations in teams and real work are neglected. And in many cases implementation of new work methods fails as the employees and teams can't participate the planning of implementation.

Innovativeness has been studied from several perspectives. West and his colleagues have studied team climate factors leading to innovativeness at group level (eg. support for innovation, shared tasks), de Jong and den Hartog innovative work behaviour and the psychosocial factors at work relating to it. Also Schaufeli and Hakanen in Finland have studied the effect of work engagement to innovativeness. In this study we combined these perspectives and studied the work-related factors, team climate and work engagement in relation to innovative work behaviour.

Material and methods

This paper is based on a data from personnel surveys (N=2312) in 6 social and health care organizations. The survey is a part of a larger Osuva-study where four action studies and this survey are combined in a multicenter study. The aim of the study is to search new methods to manage and lead the collaborative innovation process, which enable more participation of personnel, clients and service providers. Innovative work behaviour was measured using a scale of De Jong and den Hartog (2010), team climate short scale of Kivimäki and Elovainio 1999, job control and time pressure scales of Karasek (1979) and work engagement of Hakanen. The data were analysed using general linear models.

Results and conclusion

The analysis showed that team climate, job control, time pressure and work engagement as well as supervisors support on innovations all had significant and strong effects on innovative work behaviour. Support from the team for innovation and job control had the strongest effects. The study showed that innovative work behaviour is related to factors at team level, work level and work engagement.

Leadership, quality, and culture

A prospective study of the importance of leadership support for leaders' health-related sustainability and handling strategies

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Introduction
Managers and leadership approaches can have a great importance for employees' health-related sustainability. However, few published studies, and even fewer prospective ones, investigate what kind of support managers need to sustain in their position with preserved health and sustainable handling strategies. The aim is to identify sources of leadership support (from own manager, management team, colleagues, subordinates, external and private life) that predict health-care managers' health-related sustainability and handling strategies.

Material and methods
The study was a part of a larger project, the CHEFiOS-project, which aimed at exploring organizational prerequisites for managers in the Swedish public sector. A questionnaire with a 2-year follow up was sent to managers in seven municipalities. For the purpose of this study, data of the 344 health-care managers' responses to the Gothenburg Manager Stress Instrument was investigated using univariate analyses and structured equation modeling with a crossed-lagged panel design.

Results
All of the studied sources of support were cross-sectionally associated with sustainable health, but only support from private life predicted health related sustainability (stressors, stress, symptoms and health) across time. Stratified analyses revealed further prospective associations. First, among less experienced managers, all of the studied sources of support predicted at least some aspect of health-related sustainability. Second, among managers with a large span of control (> 30 subordinates), external support and support through good cooperation with subordinates predicted health-related sustainability. Regarding managerial handling strategies, a good external support and support through employees predicted participatory approaches and buffering of/decreasing high demands on employees.

Conclusions
It is important to provide health care mangers with adequate support, but only support through private life predicted health-related sustainability. However, the degree of support to managers new in their role and managers with a large span of control predicts sustainable health and managerial approaches.

Foreign born physicians in Finnish health care

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Introduction
International mobility of health care professionals is increasing. In Finland, every fifth physician getting lisence to practice during 2006-2008 was of foreign origin. Little is known, however, how working in a multicultural team affects the physicians' psychosocial work environment and attitudes of patients. We examined work-related well-being among native Finnish and foreign born physicians working in Finland.

Material and methods
A cross-sectional survey was sent for a random sample of physicians in Finland (N=7000) and additionally to all foreign born physicians licensed to practice in Finland (N= 1292, of whom 443 were included in the random sample). The final response rates were 56% (n=3646) among natives and 43% (n=553) among foreign born physicians.

Results
Compared to native physicians foreign born physicians reported more often lack of professional support ($p=0.001$), less stress related to poorly functioning information systems ($p<0.001$), more organizational justice ($p<0.001$) and poorer work ability ($p=0.002$). They also reported more bullying from patients ($p<0.001$) and their relatives ($p<0.001$). When native physicians were examined according to weather they had foreign born colleagues, those who worked in multicultural work units reported more patient-related stress ($P=0.001$),more stress due to information systems ($p=0.005$) and poorer procedural justice ($P=0.008$) compared to those who worked predominantly with Finnish colleagues. Job control and organizational justice mitigated the negative effects of working in multicultural work units among native physicians.

Conclusions
Attention should be paid to proper introduction and adequate professional support to enhance adjustment of foreign born physicians to Finnish health care. However, this support and introduction should be organized in a way that it is not an extra burden on native physicians over and above their normal duties. Language education should be provided for foreign born physicians to alleviate communication problems within multicultural work teams and between foreign born physicians and patients.

Work culture among healthcare personnel in a palliative medicine unit

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Introduction
Understanding and assessing health care personnel's work culture in palliative care is important, as a conflict between "high tech" and "high touch" is present. Implementing necessary changes in behavior and procedures may imply a profound challenge, because of this conflict. The aim of this study was to explore the work culture at a palliative medicine unit (PMU).

Material and methods
Healthcare personnel (N ¼ 26) at a PMU in Norway comprising physicians, nurses, physiotherapists, and others filled in a questionnaire about their perception of the work culture at the unit. The Systematizing Person-Group Relations (SPGR) method was used for gathering data and for the analyses. This method applies six different dimensions representing different aspects of a work culture (Synergy, Withdrawal, Opposition, Dependence, Control, and Nurture) and each dimension has two vectors applied. The method seeks to explore which aspects dominate the particular work culture, identifying challenges, limitations, and opportunities. The findings were compared with a reference group of 347 ratings of well-functioning Norwegian organizations, named the "Norwegian Norm."

Results
The healthcare personnel working at the PMU had significantly higher scores than the "Norwegian Norm" in both vectors in the "Withdrawal" dimension and significant lower scores in both vectors in the "Synergy," "Control," and "Dependence" dimensions.

Conclusions
Healthcare personnel at the PMU have a significantly different perception of their work culture than do staff in "well-functioning organizations" in several dimensions. The low score in the "Synergy" and "Control" dimensions indicate lack of engagement and constructive goal orientation behavior, and not being in a position to change their behavior. The conflict between "high tech" and "high touch" at a PMU seems to be an obstacle when implementing new procedures and alternative courses of action.

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Prominent attractive qualities of nurses work in operating room departments – a questionnaire study

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Introduction
There is a shortage of nurses in operating room departments. This can lead to cancellations of operations and reduced capacity, which in turn can result in poor outcomes for patients as well as for the entire health system. Little is known about work attractiveness in operating room departments. The Attractive Work Questionnaire, previous used outside the health care sector, focuses on positive qualities that can contribute to work attractiveness and includes items about work conditions, work content and job satisfaction that have an impact on nurse retention. The aim of the study was to capture prominent qualities of work which are attractive for nurses in operating room departments and to adapt a questionnaire.

Material and methods
The study is cross-sectional and data was collected in four operating room departments in four public Swedish hospitals with general, orthopaedic and gynaecological surgery. Participants *were a*ll operating room nurses, anaesthesia nurses and nurse assistants were invited and 147 (68%) completed the questionnaire.The 87 items questionnaires were completed in two ways: how important it is for work to be attractive, and how well it corresponds to the respondent's present work. The most prominent qualities that make work attractive were identified and the underlying structure of data was analysed.

Results
The attractive qualities were in *work conditions*: relations, leadership, equipment, salary, organisation, physical work environment, location, working hours, in *work content*: mental work, familiarity and work rate and in *job satisfaction*: status and acknowledgement. The principal component analysis showed consistency with the original Attractive Work Questionnaire. Cronbach's alpha varied between 0.57-0.90.

Conclusions
One can argue that qualities that seem to be important when discussing nurse retention and those for attractive work are for the most part the same. Compared to prior studies these qualities seem to be the same irrespective of country, work or profession. New findings such as equipment, physical work environment and location can broaden the discussion of nurse retention. The results suggest that the Attractive Work Questionnaire is reliable and valid for most of the factors, and can be used in operation room departments.

Making occupational health interventions work in practice - Applying a fidelity framework for understanding adaptations in an occupational health intervention

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Introduction
With the strain put on health organizations today, motivating occupational health interventions becomes more challenging. For researchers, this underscores two central objectives in implementing occupational health interventions. First, an intervention needs to follow existing theory and/or evidence in order to ascertain that the intervention is effective in reaching it goals, such as improved work environment or employee health. Second, the intervention needs to fit the organization, that is, match organizational and employee needs. This involves, for example, considering factors that relate to organizational efficiency. These two objectives can be contradictory and advice on how to successfully combine them is limited. This study examines if an implementation fidelity framework can be used to categorize and describe how to adapt an occupational health intervention to increase its fit to the organization.

Material and methods
Using an adapted version of the Conceptual Framework for Implementation Fidelity, we analyzed the implementation of a workplace-based physical exercise intervention and its contextualized adaptations. The study was set in a large dental health organization in Sweden. Adaptations were described in terms of content, dose, coverage and timeliness, each on three levels: employee, unit and organization. Data sources included systematic project documentation and reflexive discussions.

Results
The intervention was adapted across all aspects and levels of fidelity. Adaptations involved aligning the intervention with level characteristics: organizational level adaptations aligned health policies with cost/benefits, whereas unit level adaptations minimized interference with production and coordinated the intervention with employee preferences. At employee level, the exercise type varied, which aligned individual needs with the intervention.

Conclusions
The Conceptual Framework for Implementation Fidelity can be helpful for describing the balance between adaptation and adherence at different organizational levels. The results underscore that adaptations at employee, unit and organizational levels can increase the fit to the organization without compromising the integrity of the intervention. Over time, this may support the sustainability of occupational health interventions.

Failure due to work environment and patient safety dilemmas: An evaluation of a seemingly successful intervention to improve efficiency

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Introduction

The purpose of this study was to evaluate a pilot intervention to improve the efficiency of orthopedic surgery at the operating unit of a Swedish county hospital from a work environment perspective. Previously the unit had troubles with queues to orthopedic surgery, with procedures being postponed and many patients getting surgery during emergency time threatening patient safety. Being low in priority, orthopedic surgery, often was stopped in the afternoon to give room for more acute cases.
The ideas of the intervention was to 1) make orthopedics a separate unit within the unit to create a better staff and patient flow overview, and 2) to make it possible to initiate orthopedic surgery later in the afternoon.

Material and methods

The intervention lasted six weeks. 10 semi-structured interviews regarding the experiences of the intervention were conducted. The interviews were transcribed and coded in an explorative manner. The resulting categories constituted a foundation for a SWOT analysis and were analyzed in relation to the demand-control-support model. Data on throughput of orthopedic patients during the intervention and the same period previous year, from an internal evaluation, was statistically evaluated using Pearson's χ^2 test for independence, to determine changes in efficiency.

Results

Notable strengths were more predictable scheduling, less surgery being conducted during emergency time ($\chi^2(1, n=247) = 5.13$, $p < 0.05$), better overview over the operating team due to less staffing changes, and a better overview over the patient flow for the anesthesiologist. However the intervention also meant being more vulnerable to unforeseen staffing issues. Even when staffing was not ideal, work proceeded at full speed resulting in increased demands. The nurse anesthetists found the intervention troublesome as the patient flow became less predictable from their perspective. Therefore patient safety concerns were raised. After the pilot, the project was discontinued.

Conclusions

From an efficiency perspective the project could be regarded as successful, but from a work environment and patient safety perspective it is more complex. This illustrates the importance of considering all perspectives when designing organizational changes in multi-professional settings such as operating units and how seemingly successful interventions still can fail.

Patient safety in the ER – having the BEST experience?

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Introduction
The emergency room has traditionally been a room characterized with chaos, disorder and medical errors. A new training philosophy called BEST, aims at bettering the treatment of one of the toughest and serious challenges for any involved health care worker: the multi-traumatized patient. Through teamwork training, communication skills training and specific behavior guiding in the ER during a trauma treatment, BEST has over some 10 years achieved amazing results. In what way has this team-training helped? What problems has it created?

Material and methods
In total 15 persons were interviewed, including nurses, surgeons, anesthesiologist and orthopedists. In addition to interviews, a total of 15 hours of observation were conducted. This included the observation of a multi-trauma treatment, as well as a planned operating procedure (with the same personnel involved). We further undertook an SPGR analysis. Our research question guiding the data gathering was: What positive/negative effects do we see from training within the BEST program?

Results
The findings indicate that the BEST program has, as also indicated by more general statistics, had an important impact on teamwork in the ER. The health professionals felt considerably more secure in the chaotic environment following the multi-traumatized patient. The analysis point however to problems related to the post-ER treatment, regarding teamwork, leadership and communication. The off handing of responsibility to another doctor looks fine on paper, but in reality the social dynamics behind the respect and trust built up by the trauma leader cannot be transferred by one command. This leaves the remaining team even more insecure, uneasy and fighting with a team that doesn't work.

Conclusions
BEST shows promising results through its emphasis on teamwork and leadership. But the downside is the effects that follows from a wrongly strong emphasis on authoritative leadership and team principles not following the whole patient trajectory. Best's emphasis on the unambiguous and clear leader, creates a void when this function is dismissed in the OR. This creates a safety climate that may be worse than before BEST.

A validation project of Copenhagen Psychosocial Questionnaire in Sweden

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Introduction
Health care in Sweden has gone through major re-organization during the last two decades, and the pace of change continues to be high. Reliable instruments to monitor the situation, even at the local level, are needed. Copenhagen Psychosocial Questionnaire (COPSOQ) is a suitable staff questionnaire for mapping the psychosocial working environment as well as for evaluating changes following interventions. The intention is to present the ongoing validation project of the Swedish version of COPSOQ for use in health care organizations at the symposium.
The target group of this research project is first line health care workers with a short education and the aim is to validate the existing Swedish translation of COPSOQ and further develop scales specifically directed towards personally enriching aspects in human service work, and map the psychosocial work environment, stress, and wellbeing of first-line health care workers aiming to establish reference values. as well as to analyze the interplay between individual and group factors in relation to outcomes such as sickness absence and staff turnover

Material and methods
The project includes back-translation, cognitive debriefing interviews, a cross-sectional study at public dental practices and hospital wards, as well as register data at group level.

Results
Preliminary results from the back-translation procedure show challenges in relations to conceptual equivalence between some items in the existing Swedish version of COPSOQ and the official English version and a need for adjustments to improve clarity and the use of ordinary contemporary language. Interviews are ongoing and preliminary results will be presented at the symposium.

Conclusions
Improved knowledge about the psychosocial working environment and health among first line health care workers would increase the opportunities for promoting future working conditions which positively influence motivation, health and willingness to stay on the labor market and in the caring professions. This would support a sustainable health care system likely contributing to organizational efficiency, quality in patient-work, and a good work life for employees.

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Patient's perception of quality of care in dentistry. The importance of information and treatment from the patient's perspective

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Introduction
Dentistry in Sweden is changing due to shifts in the labor market which brings restructuring of work tasks between professional categories. This restructuring is necessary but can affect the work environment and dental care quality. Before making major changes in health care organizations there is a need of evaluation at multiple levels, such as organization/resources, processes and results. Patient satisfaction is a part of the patients' perspective of quality of care and a part of evaluation at results level. The patients' perspective should be considered when evaluating work environment in dentistry because it can be considered as an evaluation of combined function of organization/resources and processes levels.
The aim of the study was to explore patients' perception of quality of dental care, measured as patient satisfaction. The design was a cross-sectional study performed in Jönköping County, Sweden. The study population were based on a consecutive sample of adult patients after a visit at a Public Dental Service Clinic.

Material and methods
The participants were asked to answer a self-reported questionnaire consisted of 31 questions directed to dentistry and the abbreviated version of the Humanism scale, measuring patient's perception of the caregivers humanistic behavior. Focus was directed towards information, treatment and overall impression.

Results
Results are based on 204 participants and shows in general a high level of patient-satisfaction, with both received dental care and care-givers humanistic behavior, among the majority of the participants. However, statistically significant differences were found between groups. Men experienced less satisfaction with information of self-care than women (p=0.021) and among the youngest (20-39 years), more participants experienced less possibility to talk to care-giver about worries or anxiety than older participant did (p=0.020). A statistical significant difference were also found between groups based on native language. Participants with another native language than Swedish had less confidence in care-giver (p=0.040) as well as lower satisfaction with information about treatment options (p=0.010) compared to participants with Swedish as native language.

Conclusion
The majority of the participants experienced a high degree of satisfaction with the quality of received dental care and care-givers humanistic behavior but statistical significant differences were found between groups in some areas.